

National Marine Sanctuaries
National Oceanic and Atmospheric Administration



NATIONAL MARINE
SANCTUARIES

OLYMPIC COAST



OCNMS and Washington's Outer Coast

Sentinel Site Concept

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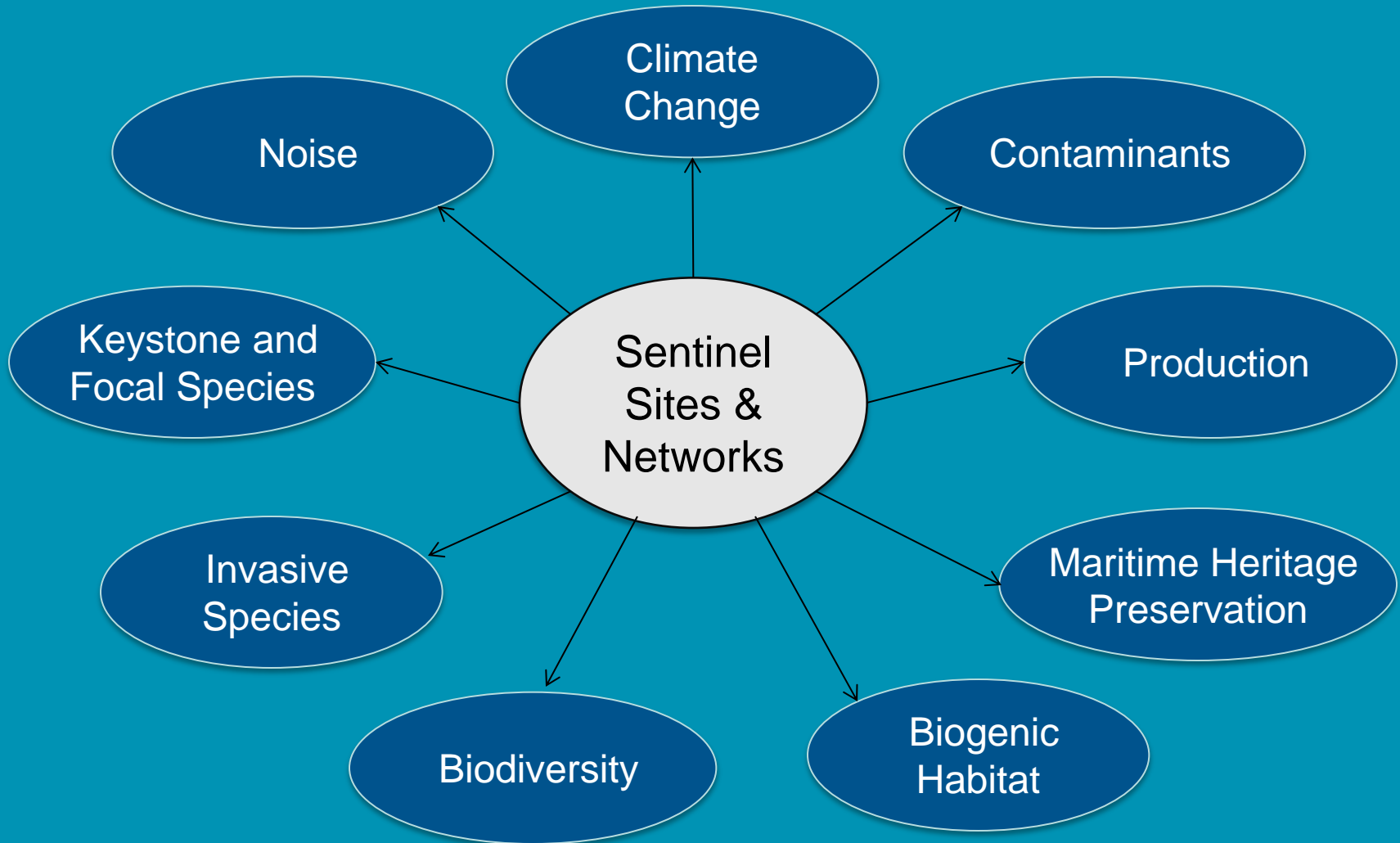


<http://oceanservice.noaa.gov/sentinelsites/>

Sentinel Site Concept

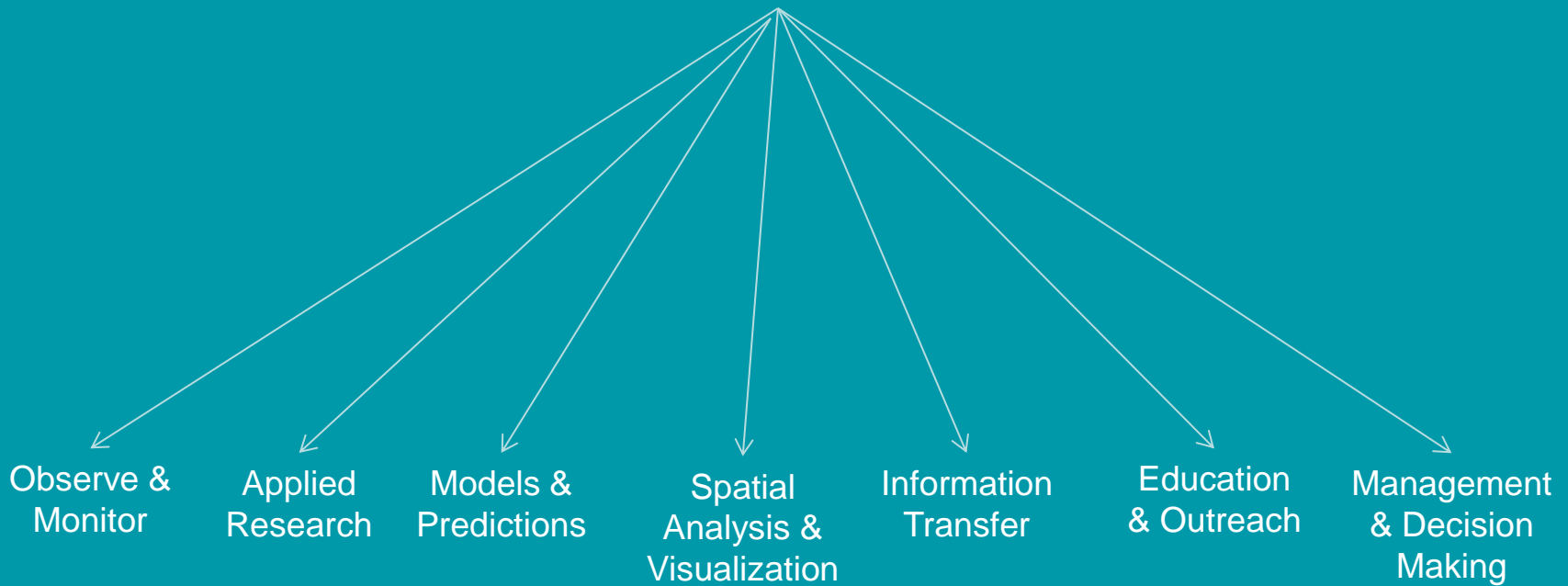
- Place-based, issue-driven approach
- Global issues, local focus
- Leverage existing assets and resources
- Engage all levels of government and private sector
- Improved coordination of planning and execution

Examples of Sentinel Site Issues



Fully-Functioning Sentinel Program

Sentinel Program



Science



Service



Stewardship

Why National Marine Sanctuaries?



- Place-based
- Foster collaborations
- Promote long-term monitoring
- Ecosystem health/marine conservation focus

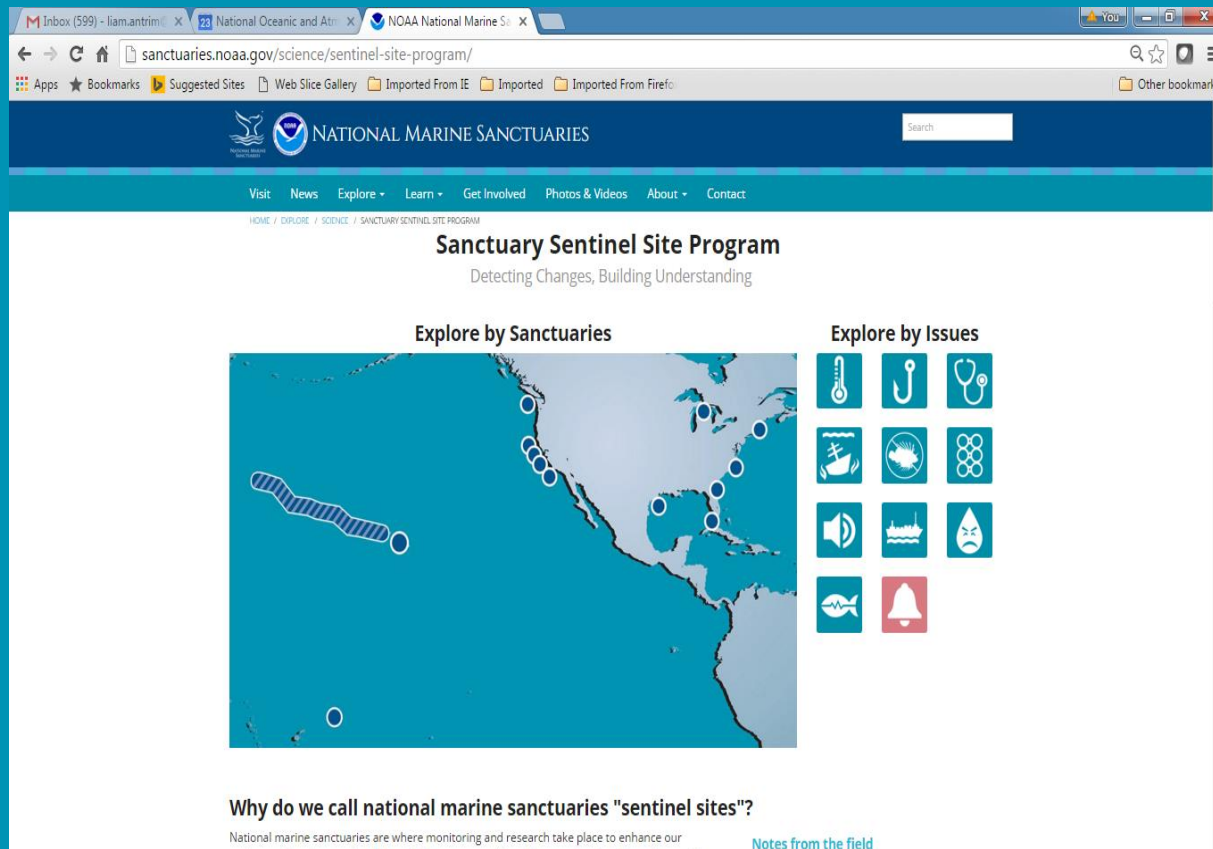
Goal - to protect important natural and cultural places, while still allowing people to enjoy and use the ocean

ONMS Sentinel Monitoring: Key Messages

- **Sentinel sites** are defined areas for sustained observation and study.
- **Sentinel monitoring** informs management by increasing understanding of ecosystems and by providing early warnings of ecosystem change.
- A **sentinel program** attracts and supports collaboration and advances sanctuary science



Sanctuary Sentinel Website



- 1) Climate Change and OA
- 2) Integrity of Heritage Resources
- 3) Noise
- 4) Wildlife Health
- 5) Fishing
- 6) Invasive Species
- 7) Vessel Impacts
- 8) Human Health
- 9) Marine Debris
- 10) Water Quality

<http://sanctuaries.noaa.gov/science/sentinel-site-program/welcome.html>

Why OA at OCNMS?

Existing infrastructure

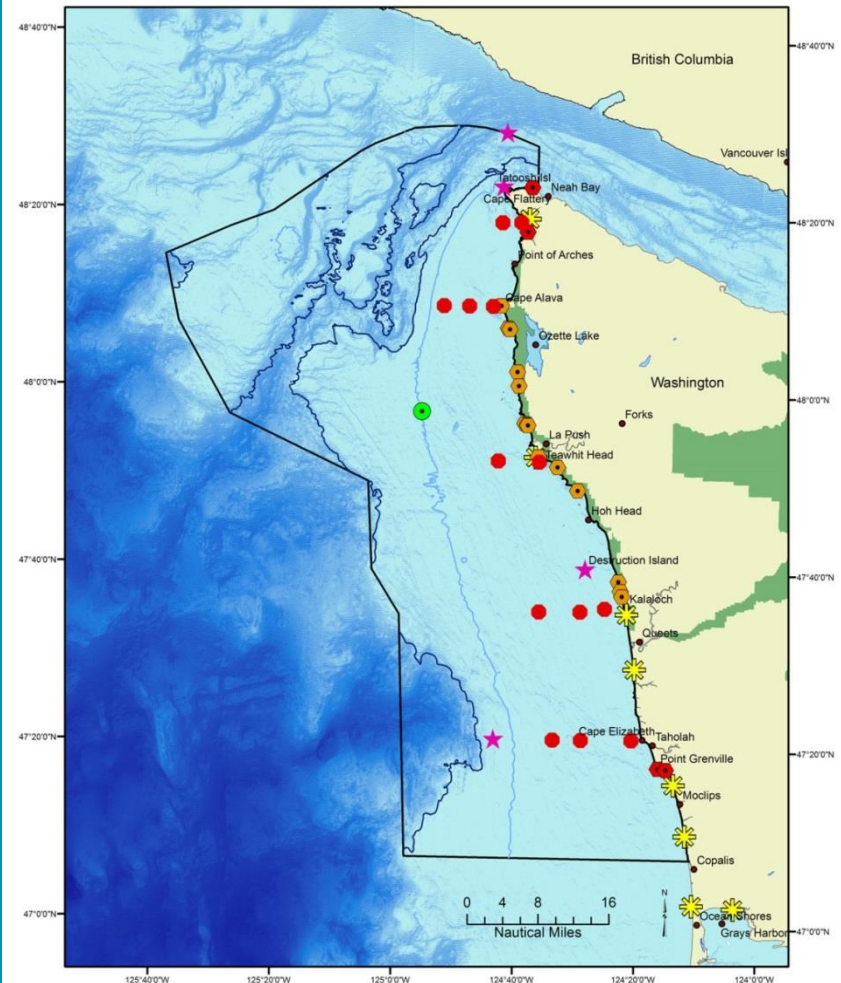
Long-term data sets



Legend

- OCNMS moorings
- OCNMS intertidal
- ONP intertidal
- ★ NDBC weather stations
- UW/APL mooring
- ✱ ORHAB shore stations
- 100 m bathymetry
- 200 m bathymetry
- OCNMS boundary
- Olympic National Park

Long-term Monitoring Stations in Olympic Coast National Marine Sanctuary



Why OA at OCNMS?

Location

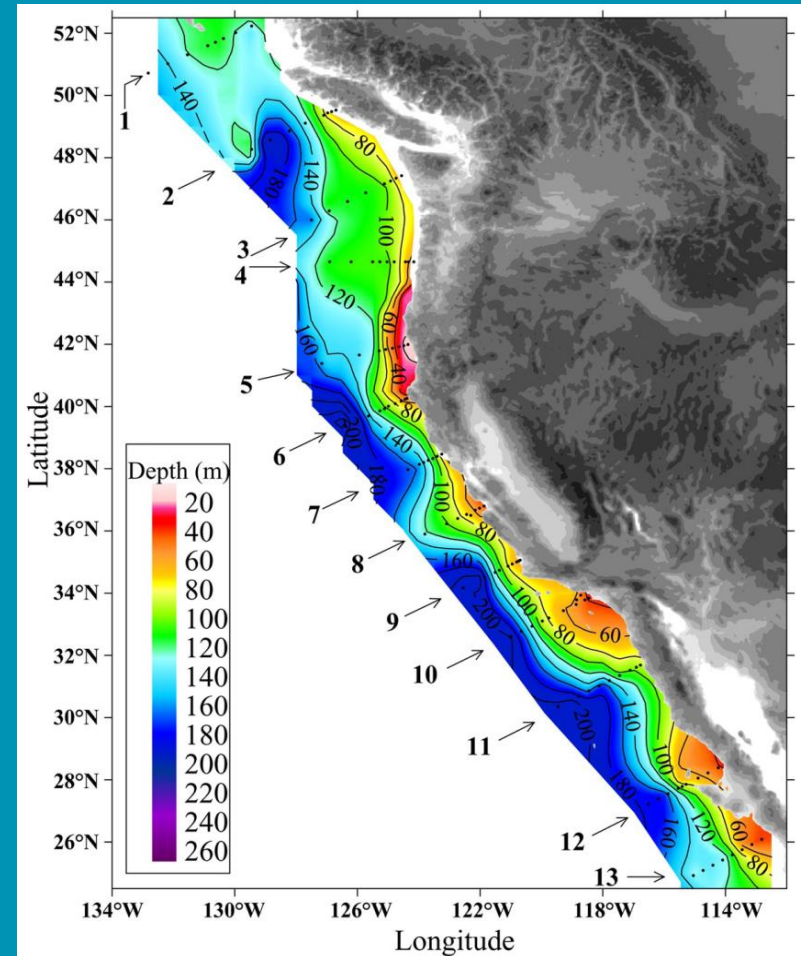
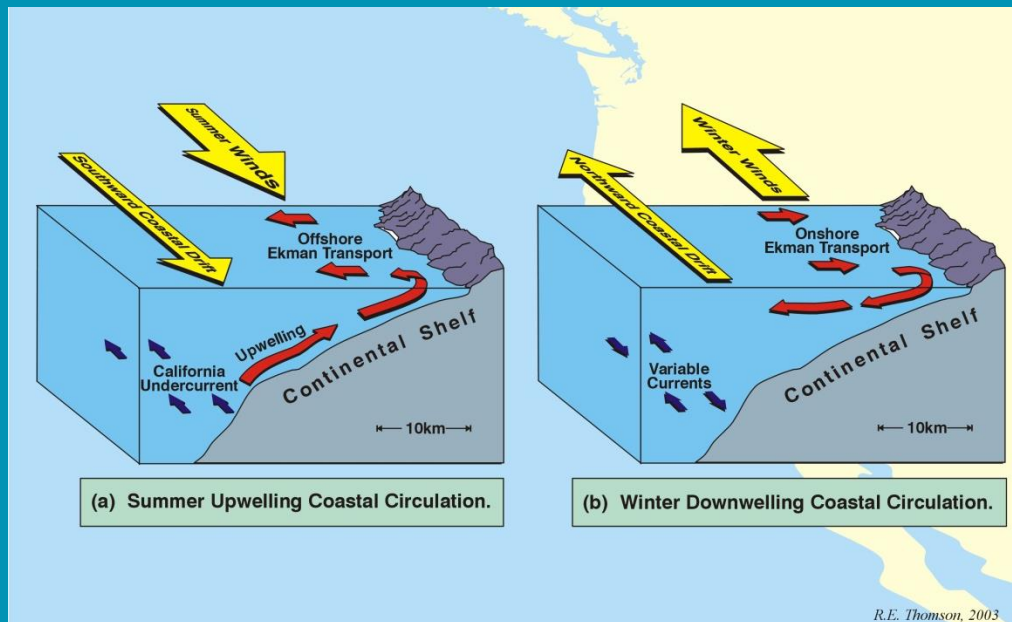
- California Current Large Marine Ecosystem
- Juan de Fuca Eddy
- Entrance to Salish Sea ♦
- Place based ties



Why OA at OCNMS?

Vulnerability

- Ecological
- Economic



Why OA at OCNMS?

Established collaborations
Regional scientific centers



Ongoing education and
outreach programs

Goals of OA Sentinel Site

- Track early warning indicators so we can respond
- Understand ecosystem processes and living resource quality
- Attract collaborators
- Improve information flow
- Interpret science to the public



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